

IRON SHIP.

No. 24178 Survey held at Liverpool Date, First Survey 9th Oct 1873 Last Survey 18th May 1874
On the "Emerdale" Yard Number 47 Master M^r Porter

TONNAGE under Tonnage Deck } 1161.41
Ditto of Third, Spar, or Awning Deck. }
Ditto of Poop, or Raised Or. Dk. } 85.60
Ditto of Houses on Deck } 20.53
Ditto of Forecastle } 31.57
Gross Tonnage } 1299.04
Less Crew Space } 50.37
Less Engine Room }
Register Tonnage as cut on Beam } 1248.67

ONE, OR TWO DECKED, THREE DECKED VESSEL.
SPAR, OR AWNING-DECKED VESSEL.
HALF BREADTH (moulded) 18.0
DEPTH from upper part of Keel to top of Upper Deck Beams 24.2 1/2
GIRTH of Half Midship Frame (as per Rule) 36.11
1st NUMBER 79.125
1st NUMBER, if a THREE-DECKED VESSEL deduct 7 feet 217.75
LENGTH 172.29
2nd NUMBER 9
PROPORTIONS—Breadths to Length 9
Depths to Length—Upper Deck to Keel 6.125
Main Deck ditto

Built at Liverpool
When built 1874 Launched 2nd Apr 74
By whom built W. A. Potter & Co
Owners J. D. Newton & Co
Port belonging to Liverpool
Destined Voyage Melbourne
If Surveyed while Building, Afloat, or in Dry Dock.

LENGTH on deck as per Rule ... 217 9 Feet. Inches. BREADTH Moulded ... 36 - Feet. Inches. DEPTH top of Floors to Upper Deck Beams ... 22 - Feet. Inches. Do. do. Main Deck Beams ...
Power of Engines ... 1 Horse. N^o. of Decks with flat laid 2 N^o. of Tiers of Beams 2

Dimensions of Ship per Register, length 226.4 breadth, 36.3 depth, 21.85

	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.	Inches in Ship.	Inches per Rule.
KEEL, depth and thickness	9 x 2 1/2	9 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2
STEM, moulding and thickness	8 1/2 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2
STERN-POST for Rudder do. do. for Propeller	8 1/2 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2	8 1/2 x 2 1/2
Distance of Frames from moulding edge to moulding edge, all fore and aft	24	24	24	24	24	24	24	24
FRAMES, Angle Iron, for 1/2 length amidships Do. for 1/2 at each end	5	3	5	3	5	3	5	3
REVERSED FRAMES, Angle Iron	3	3	3	3	3	3	3	3
FLOORS, depth and thickness of Floor Plate at mid line for half length amidships thickness at the ends of vessel depth at 1/2 the half-bdth. as per Rule height extended at the Bilges	24	10	24	10	24	10	24	10
BEAMS, Upper, Spar, or Awning Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	9	8	9	8	9	8	9	8
Single or double Angle Iron on Upper edge Average space	4 feet	4 feet	4 feet	4 feet	4 feet	4 feet	4 feet	4 feet
BEAMS, Main or Middle Deck Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	9	8	9	8	9	8	9	8
Single or double Angle Iron, on Upper Edge Average space	4 feet	4 feet	4 feet	4 feet	4 feet	4 feet	4 feet	4 feet
BEAMS, Lower Deck, Hold or Orlop Single or d'ble Ang. Iron, Plate or Tee Bulb Iron	9	8	9	8	9	8	9	8
Single or double Angle Iron on Upper Edge Average space	4 feet	4 feet	4 feet	4 feet	4 feet	4 feet	4 feet	4 feet
KEELSONS Centre line, single or double plate, box, or Intercoastal, Plates	16	12	16	12	16	12	16	12
" Rider Plate	9	10	9	10	9	10	9	10
" Bulb Plate to Intercoastal Keelson	5	4	5	4	5	4	5	4
" Angle Irons	5	4	5	4	5	4	5	4
" Double Angle Iron Side Keelson	5	4	5	4	5	4	5	4
" Side Intercoastal Plate	5	4	5	4	5	4	5	4
" do. Angle Irons	5	4	5	4	5	4	5	4
" Attached to outside plating with angle iron	3	3	3	3	3	3	3	3
BILGE Angle Irons	5	4	5	4	5	4	5	4
" do. Bulb Iron	5	4	5	4	5	4	5	4
" do. Intercoastal plates riveted to plating for length	5	4	5	4	5	4	5	4
BILGE STRINGER Angle Irons	5	4	5	4	5	4	5	4
Intercoastal plates riveted to plating for length	5	4	5	4	5	4	5	4
SIDE STRINGER Angle Irons	5	4	5	4	5	4	5	4
Transoms, material. Knight-heads. Hawse Timbers.	Iron		Iron		Iron		Iron	
Windlass	Iron Patent		Pall Bitt	none				

Flat Keel Plates, breadth and thickness ... 36 13 1/2 36 11 1/2
PLATES in Garboard Strakes, breadth and thickness from Garboard to upper part of Bilges of doubling at Bilge, or increased thickness, and length applied ... 12 1/2 11 1/2 10 1/2 8
fm up. part of Bilge to lr. edge of Sh'rstrake Main Sheerstrake, breadth and thickness of d'bling at Sh'rstrake, & length applied from Mn. to Up. or Spar Dk. Sh'rstrake. Up. or Spar Dk Sh'rstrake, brdth & thickness
Butt Straps to outside plating, breadth & thickness Lengths of Plating ... 12 feet
Shifts of Plating, and Stringers ... 4 feet
Gunwale Plate on ends of Awning, Spar, or Upper Deck Beams, breadth and thickness ... 4 1/2 10 4 1/2 10
Angle Iron on ditto ... 5 x 4 x 9 5 x 4 x 9
Tie Plates fore and aft, outside Hatchways ... 10 10 10 10
Diagonal Tie Plates on Beams No. of Pairs, none none
Planksheer material and scantling ... Iron Butt
Waterways do. do. ... Iron Butt
Flat of Upper Deck do. do. ... Iron Butt
How fastened to Beams ... Iron Butt
Stringer Plate on ends of Main or Middle Deck Beams, breadth and thickness ... 28 9 28 9
Is the Stringer Plate attached to the outside plating? Yes
Angle Irons on ditto, No. 2 ... 4 x 4 x 9 4 x 4 x 9
Tie Plates, outside Hatchways ... 10 9 10 9
Diagonal Tie Plates on Beams, No. of pairs ... 10 9 10 9
Waterways materials and scantlings ... Iron Butt
Flat of Middle Deck do. do. ... Iron Butt
How fastened to Beams ... Iron Butt
Stringer Plates on ends of Lower Deck, Hold or Orlop Beams ... 28 9 28 9
Is the Stringer Plate attached to the outside plating? Yes
Angle Irons on ditto, No. 2 ... 4 x 4 x 9 4 x 4 x 9
Stringer or Tie Plates, outside Hatchways ... 10 9 10 9
Flat of Lower Deck ... Iron Butt
Ceiling betwixt Decks, thickness and material ... Iron Butt
in hold do. do. ... Iron Butt
Main piece of Rudder, diameter at head ... 6 3 1/2 6 3 1/2
do. at heel ... 3 1/4 3 1/4
Can the Rudder be unshipped afloat? Yes
Bulkheads No. 1 Thickness of 7/16
Height up Upper deck
How secured to sides of ship double frames
Size of Vertical Angle Irons 3 x 3 x 8/16 and distance apart 30 ins.
Are the outside Plates doubled two spaces of Frames in length? Yes

The FRAMES extend in one length from Keel to Gunnwale Riveted through plates with 7/8 in. Rivets, about 7 apart.
The REVERSED ANGLE IRONS on floors and frames extend across middle line to Hold Beam and to Deck Beams alternately
KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? Yes And butts properly shifted? Yes
PLATING. Garboard, double riveted to Keel, with rivets 1/8 in. diameter, averaging 5 1/2 ins. from centre to centre.
Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 7/8 in. diameter, averaging 4 ins. from centre to centre.
Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 7/8 in. diameter averaging 4 ins. from centre to centre.
Butts of 3 Strakes at Bilge for 1/2 length, treble riveted with Butt Straps 7/16 thicker than the plates they connect.
Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 7/8 in. diameter, averaging 4 ins. from cr. to cr.
Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 7/8 in. diameter, averaging 4 ins. from cr. to cr.
Edges of Main Sheerstrake, double or single riveted. Upper Sheerstrake, double or single riveted. Double
Butts of Main Sheerstrake, treble riveted for 1/2 length amidships. Butts of Upper or Spar Sheerstrake, treble riveted 1/2 length amidships.
Butts of Main Stringer Plate, treble riveted for 1/2 length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for 1/2 length.
Breadth of laps of plating in double riveting 5 1/4 Breadth of laps of plating in single riveting none
Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted? Double & Treble
Waterway, how secured to Beams (Explain by Sketch, if necessary.)
Frames of the various Decks, how secured to the sides? By Bulb plate knees No. of Breasthooks, 7 Crutches, 7
Description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Good
Manufacturer's name or trade mark, Palmer Sanow & Cleveland & Best
The above is a correct description.
Signature, M. A. Potter & Co Surveyor's Signature, W. A. Darcy

Workmanship.

Are the butts of plating planed or otherwise fitted? Planed

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Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies? Yes

Are the fillings between the ribs and plates solid single pieces? Solid single pieces

Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? Yes

Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? Yes

Do any rivets break into or through the seams or butts of the plating? but few

Masts, Bowsprit, Yards, &c., are partly iron in Good condition, and sufficient in size and length. If of Iron or Steel give Scantlings of Plating, Angle Irons, &c., and further explain by a Sketch showing how the lower Masts and Bowsprit are constructed, showing the number of Plates and Angle Irons, mode of riveting, quality of Materials, and if stamped with Maker's name.

State also Length and Diameter of Lower Masts and Bowsprit Fore mast 79' 8" - Main - 81' 3" - 1st 30" Mizzen 73' x 24" Bowsprit 74'
Mast & Bowsprit plates 6' x 5' with 4 angle bars 4 x 3 x 7/16 - Fore and Main Yards 80' x 19" Plates 6' x 4' with 3 angle bars 3 x 3 x 7/16. Fore Main lower topsail Yards 68' x 16" Plates 6' x 4' with 3 angle bars 3 1/2 x 2 x 5/16
Cross Jack Yard 62' x 15" Plates 5' x 3' with 3 angle bars 2 x 2 x 7/16. Mizzen lower topsail Yard 52' x 12"
Plates and Angles as Class Sack - Butts of masts table riveted at decks. double above
Bowsprit double at knightheads. B Yards double at slings

NUMBER for EQUIPMENT 18957

N ^o .	SAILS.	CABLES, &c.	Fathoms.	Inches.	Test per Certificate.	Length & Size req'd per Rule.	Test req'd per Rule.	ANCHORS, &c.	N ^o .	Weight, Ex. Stock.	Test per Certificate.	Weight req'd per Rule.	Test req'd per Rule.
2	Fore Sails,	Chain ...	240	1 13/16	59 1/2 and 82 1/4	270 13/16	59 1/2	Bowers	1396	32.1.24	30.10.0	32	30 3/4
	Fore Top Sails,	(State Machine where Tested, Date, & name of Superintendent.)							1398	32.1.6	30.7.0	32	30 3/4
	Fore Topmast Stay Sails	Stream Chain	90	1 1/4					1397	28.0.22	27.6.0	27 1/4	27
	Main Sails,	Hmpn Strm Cbl	90	1 1/4				Stream		13.1.13		13.0.0	
	Main Top Sails,	Hawser ...	90	6		90	9 1/2	Kedges		6.2.0		6.2.0	
	and	Towlines ...	90	9			6			3.1.9		3.1.0	
		Warp ...											
		quality <u>Good</u>											

Standing and Running Rigging Wire & Hemp sufficient in size and Good quality. She has 2 Life Long Boat Sails Runace & Rig

The Windlass is Harford Patent Capstans Good and Rudder Good Pumps 2 Main & 2 Bilge

Engine Room Skylights. How constructed? —

How secured in ordinary weather? —

What arrangements for deadlights in bad weather? —

Coal Bunker Openings. How constructed? —

How are lids secured? —

Height above deck? —

Scuppers, &c. What arrangements for clearing upper deck of water, in case of shipping a sea? —

Cargo Hatchways. How formed? Iron framing as per Section

State size Main Hatch 15ft 6" x 10ft 6" Fore hatch 6ft x 6ft Quarter hatch 7ft 6" x 5ft

If of extraordinary size, state how framed and secured? —

What arrangement for shifting beams? Plate Beam with double angle bars

Hatches, If strong and efficient? Strong & Efficient

Order for Special Survey No. 573

Date 23 April 1874

Order for Ordinary Survey No. —

Date —

No. — in builder's yard.

DATES of Surveys held while building as per Section 18.

- 1st. On the several parts of the frame, when in place, and before the plating was wrought
- 2nd. On the plating during the process of riveting
- 3rd. When the beams were in and fastened, and before the decks were laid....
- 4th. When the ship was complete, and before the plating was finally coated or cemented..
- 5th. After the ship was launched and equipped

Special Survey

General Remarks, (State quality of workmanship &c.)

This Vessel is well built. The plating much in excess of the Rules as will be seen by accompanying measurement Section - The figures in Red denoting requirements per Rule.
She has a Poop and Forecastle length of Poop 54ft. length of Forecastle 32ft (Tracing attached)

State if one, two or three decked vessel, or if spar or awning decked, and lengths of poop, forecastle or raised quarter deck, or of double or part double bottom.

How are the surfaces preserved from oxidation? Inside Cement & Paint Outside Paint

I am of opinion this Vessel should be Classed 100 A 1

The amount of the Entry Fee ... £ 5 : - : - is received by me,

Special ... £ 56 : 4 : 6 19/5/1874

Certificate ... Gratis

(Travelling Expenses) (if any) £ —

Committee's Minute Liverpool 19th May 1874

Character assigned 100 A 1 - Built under Special Survey

(A & C.P.) - Com. 74 - J.B.L.

Will. B. Dacey

This vessel appears to be fitted to be classed 100 A 1 as recommended

A.C.P. Com 74

Lloyd's Register Foundation